

## ABSTRACT

An object of the present invention is to reduce power consumption in a plasma display panel (PDP) by reducing the discharge firing voltage, while suppressing the occurrence  
5 of discharge variability when the PDP is driven, as well as ensuring the wall-charge holding performance of a protective film surface. To achieve this, a front panel of a PDP of the present invention has a catalyst layer dispersed on a surface of display electrodes formed in stripes on one side of a glass  
10 substrate, and needle crystals composed of graphite formed to stand upright on the catalyst layer. The needle crystals form a phase-separated structure with the materials of a dielectric film and a protective film.